

In the Claims:

1. (original) An apparatus for producing water on board of an aircraft while using one or more fuel cells, wherein a partial or complete integration of a water production unit in the form of one or more high temperature fuel cells (7) into an aircraft engine is provided in such a manner that the combustion chambers (7A) of the aircraft engine are replaced completely or partially by the high temperature fuel cells (7) and thus either supplementing or completely replacing the process that takes place in the conventional type combustion chambers, characterized in that the high temperature fuel cells (7) are constructed as type: oxide ceramic fuel cell (SOFC - solid oxide fuel cell) or as a molten carbonate fuel cell (MCFC), or a type that is comparable in power and temperature level; that pure hydrogen is supplied to the anode side of said high temperature fuel cells (7), that air is supplied to the cathode side of said high temperature fuel cells, that a mixture of hydrogen and air is supplied to the combustion chambers (7A), that at least the hydrogen supply is constructed for a closed loop control or can be shut off completely, and that a single stage or multistage turbine (16) is connected downstream of the anode side of the high temperature fuel cell, said turbine converting the thermal energy of the anode exhaust gas (35) into rotation energy.

1 2. (original) The apparatus of claim 1, characterized in that  
2 the conversion of the thermal energy takes place by a  
3 Stirling motor and/or by one or more combinations of  
4 different thermal engines, for example a turbine and a  
5 Stirling motor.

Claims 3 to 24 (canceled).

[REMARKS FOLLOW ON NEXT PAGE]